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Response to Larry Shapiro: “Lessons from Causal Exclusion”

Larry Shapiro’s argument against Jaegwon Kim’s Problem of Causal Exclusion in “Lessons from Causal Exclusion” rests on two key points. Shapiro’s characterization of Kim’s argument is that the Causal Exclusion Problem rests on two key claims, the Principle of Causal Inheritance and the Principle of Non-Inclusion. Shapiro argues both that there are positive reasons to reject these principles and that there are no good reasons with empirical foundations for accepting the principles. I will treat Shapiro’s evaluations of each of these two principles individually and show why his objections to Kim’s reasoning are actually rather weak. Shapiro’s article does have one redeeming quality, however. It raises the questions of the epistemological foundations of the premises of Kim’s Causal Exclusion Argument, which are left vague in Kim’s own work. I will conclude with considerations on this issue.

Shapiro argues that Kim’s Causal Exclusion Problem rests the following principle, among others, known as the Principle of Causal Inheritance. The principle states that “if M is instantiated on a given occasion by being realized by P, then the causal powers of this instance of M are identical with (perhaps a subset of) the causal powers of P”. Shapiro notes that Kim’s response to this principle is to raise the question regarding whether one has any reason to invoke

M as a cause of some further physical principle at all, if M adds nothing to the causal powers of P.

Kim's question, Shapiro argues, betrays Kim's commitment to a second principle, the Principle of Non-Inclusion: "When the causal powers of an instance of property A are a subset of the causal powers of its supervenience base B, the instance of A is not a real cause." Shapiro claims that the conjunction of these two principles amounts to the problem Kim sees for Mental Causation in his Causal Exclusion Argument. Since the Problem of Causal Exclusion rests on these two principles, Shapiro correctly states that one must consider the justification for these principles for them to be accepted, and hence to accept the Causal Exclusion Problem as a genuine problem for Mental Causation.

From an empirical point of view, the justification of these two principles is tied to (or perhaps is defined by) the principles' testability. Shapiro in this article, as well as Shapiro and Sober in "Epiphenomenalism- The Do's and the Don'ts," argues that these principles are in principle untestable because it requires a kind of manipulation that is impossible. In order to test the Principle of Causal Inheritance, one would have to hold fixed a mental property's physical supervenience base while manipulating the supervening mental property. This manipulation is impossible, Shapiro claims because of the nature of the supervenience relation as a relation of

necessity. If a supervenience base necessarily instantiates its supervening property, then there is no way to hold fixed the supervenience base while manipulating the supervening property.

After tracing through the testability objection in true empiricist form, Shapiro makes what I consider to be a claim that is in conflict with his strict reliance on empirical manipulationist methodology. Shapiro states that "…despite its untestability, the principle might be true." (Shapiro, pg. 7) Shapiro explicitly refuses to adopt a verificationist attitude that would deny the Principle of Causal Inheritance any meaning due to its lack of testability. He takes the principle not to be an empirical proposition but a proposition about how causes are to be defined.

If Shapiro is willing to entertain the truth of the Principle of Causal Inheritance despite the principle's untestability, I am concerned that his argument does little to threaten the metaphysical problem (i.e. a problem that is concerned with the essential definition of causation aside from the empirical testability of causal relationships) that is raised by Kim's Causal Exclusion Problem. I fail to see how an argument that shows only that a certain principle is untestable, rather than the stronger conclusion that it is false, could be an argument against a principle that Shapiro himself admits could still possibly be true.

The only way I can see to bridge the gap between the

untestability of a principle and its rejection as a falsity would be to invoke some sort of general principle that metaphysical facts beyond those that are empirically testable are not able to be entertained as true. My suspicion is that this general principle would be a stronger claim than most empiricists, who would like to leave room for true metaphysical facts that are epistemically closed to us, would be willing to accept. One perhaps overly simple reason to leave open the possibility of true metaphysical facts beyond an empirical grasp would be to allow for future progress as our empirical research methods improve. Without this stipulation, the empirical sciences would already be complete rather then be in progress towards new empirical but as yet undiscovered knowledge. But even supposing that one restricts the field of discussion to those metaphysical facts that are inherently and by definition untestable and beyond the grasp of empirical study (not just those metaphysical facts that will become empirical at some point if and when empirical methods improve), the only way that one could promote a strong argument against such principles, as Shapiro does in this article, would be to posit a 1:1 correspondence between an ideally complete empirical methodology and all true metaphysical facts. This immediately raises the question about the strength of empirical claims and methodology. Does taking an empirical point of view allow one to decide what facts we have access to, or does the empirical methodology itself define the nature

of true facts?

Whether Shapiro is successful in his argument against Kim's central principle hinges on how he responds to this question. If he responds in the negative, then it seems he is unsuccessful in arguing that the Causal Exclusion Problem fails to be a genuine metaphysical problem. If he answers in the positive, which he himself seems not to do based on his admission that the Principle of Causal Inheritance *could* be true, then he may be successful in his argument against the Causal Exclusion but I am skeptical that this view itself could ever be empirically verified. The strong empirical principle in question may be self-defeating in the same way the Verification Principle of Meaning is self-defeating and which Shapiro wishes to avoid relying upon for his argument against Kim.

Shapiro does offer one positive reason for rejecting the Principle of Non-Inclusion (the principle that a property's causal powers are not real if those causal powers are a subset of the causal powers of the property's supervenience base). Shapiro claims that the success of the special sciences (such chemistry, biology, psychology, economics, etc.) is a reason to reject the Principle of Non-Inclusion. Shapiro argues that the Principle of Non-Inclusion requires that we deny the reality of the supervening causes to which the special sciences refer and because of which they have been so successful in their explanatory power. Shapiro himself does seem open to the idea that

these supposed causes are pseudo causes: “Chemistry, biology, sociology, economics, and so on, provide explanations and predictions that, at least on their surface, include reference to [supervening causes].” (Shapiro, pg. 8) While I am sympathetic with Shapiro’s reasoning here concerning the great explanatory power that the specialized sciences have obtained by utilizing higher-order concepts and structures, I feel that there are at least two objections that one could raise in response.

The first problem that I see with Shapiro’s reasoning here is that in principle even a reductionist could agree that the reference to supervening causes in the special sciences are causes on their surface (Shapiro is very careful with his terminology here). But the question is not whether the causes referred to in the special sciences are *prima facie* causes but whether they are *genuine* causes. At least some types of reductionists could agree that the positing of supervening concepts yields great explanatory power; but “explanation” is an epistemological concept rather than a metaphysical one. So again, as above, the only way for Shapiro’s argument to be successful is for him to step outside the bounds of epistemology and into the bounds of metaphysics by claiming a type of correspondence between empirical methodology, explanatory power, and the nature of reality.

The second objection I would like to raise is aimed at his claim that supervening causes are linked with an increase in explanatory

power. Assuming this claim were true, in order for the argument to be successful there still must be an implicit link between explanatory power and what counts as a genuine (not merely prima facie) cause. If the principle linking explanatory power to genuine causation holds (which I am skeptical of for the reason discussed in the above paragraph, but which I am granting as an assumption for the sake of argument), then it seems that one has just as much reason to conclude that only basic or lower-level physical properties are genuine causes by the explanatory success that reductionist methodology has enjoyed. Consider for example the success of psychiatry in treating mental disorders as brain disorders that arise from chemical imbalances. A reductionist would argue that to deal with the supervening mental causes is to have less explanatory power than to look at the underlying physical disorders. Granting Shapiro the claim that increased explanatory power is the key to genuine causation, it seems that one has at least as much reason to prefer lower level causes to higher ones as to prefer the contrary.

Shapiro could reply that the choice between higher and lower level causes is a type of false dichotomy, since the presence and admission of supervening causes would not necessarily supersede (and in fact even depends upon) the presence of causes at the level of the supervenience base. So the preference of higher level causes is not in conflict with the presence of lower level causes, on this

account. But this is problematic because, as noted above, there seems to be an asymmetry in terms of explanatory successes of reductionism and the explanatory successes of the special sciences and their supervening causes. What is particularly problematic here is that both sides of the reductionism debate invoke explanatory success to justify their respective claims about the nature of genuine causation. Given this apparent conflict of explanatory successes, I am skeptical of the validity of this line of argument. In the absence of a well justified principle linking epistemological explanatory success to metaphysical reality, I worry that explanatory success will not be enough for either the reductionist or the non-reductionist to make the case for his view. Of course, and this seems to be the heart of Shapiro's point here, it seems that the only way to try to gain access to metaphysical reality is via explanatory success. So we are left with competing claims to explanatory success.

One possible way to resolve this tension is to take the perspective of a multi-leveled conception of reality. There are causes at various levels that are not in completion with each other. Which causes are to be preferred (at one level versus another) will be dependent upon which level has the greatest explanatory success. Another way to resolve this tension would be for the reductionist and the non-reductionist to hold their respective grounds and wait for further progress in the natural sciences to yield a unified answer to

the question of which method yields the greatest explanatory success universally. While this second option is less satisfying on the surface since it makes the answer to a philosophical question about causation dependent upon hypothesized future scientific knowledge (in other words on shaky foundations), on the other hand I find the multi-layered conception of reality and causation to be at best incomplete and at worst conceptually unstable. If causation is to be treated on a case-by-case basis, with one level being preferred in one area of study and another level of causation being preferred in a different area of study, then there is an apparent disunity to our concept of causation with no satisfactory explanation as to *why* causation is most effective at those levels. At best we could appeal to explanatory success, but this is circular; it justifies positing causation at that level by appealing to explanatory success, but in turn explanatory success at one level over another is explained by the presence of causation at that level. I find this line of reasoning to be circular and also the multi-layered conception of causation to be unacceptably disunified and lacking in its ability to provide non-circular explanation for the primacy of causation at one level over another (given that this entire line of reasoning began with Shapiro's supposition that higher level causes yield an *increase* in explanatory adequacy).

The issue of explanatory success aside, Shapiro also faults Kim for relying heavily on arguments against overdetermination when

laying out the Causal Exclusion Problem. Shapiro feels that the arguments against overdetermination are a red herring insofar as they claim that the physical property P and the mental property M are competing and independent causes when in fact they are necessarily linked via the supervenience relation and not independent at all. Now Kim does recognize this point, and it is precisely because of the supervenience relation that he sides with P as a genuine cause of the subsequent physical property P* rather than M. To do the opposite would be a return to Cartesian dualism insofar as a mental property M would be unanchored to a physical property. Kim finds this consequence unacceptable.

But already Kim is betraying the type of bias towards separability of P and M that Shapiro is criticizing him for. For if M truly supervenes on P, with an instance of P necessarily implying an instance of M, I am concerned along with Shapiro that Kim is being incoherent when he posits P alone without M. Others like Karen Bennett have noted that in reality a mental property M supervenes not on a single physical property P but rather on a complex set of physical properties that constitutes the necessary background conditions for M to be instantiated. If this is the case, one problem with Kim's argument is that Kim has vastly oversimplified the necessary conditions for a mental property M to be instantiated. If we modified Kim's argument to allow P to represent this complex set

of physical background conditions, then it seems the same problem arises and one can ask about the coherence of positing the entire set of conditions without M. So a simple appeal to the complexity of the supervenience base of mental properties will not be enough to avert the worry about the coherence of positing a supervenience base without its supervening property.

Despite the conceptual impossibility of a supervenience base that lacks its supervening mental property, it seems that Kim could appeal here to the distinction between M and P as grounds for treating them separately. Although M supervenes on P, Kim is not considering an identity theory but rather non-reductive physicalism. So while M and P are necessarily linked together, they are not identical and have different essential properties. This conceptual wiggle room for considering M and P separately may be all Kim needs to justify his counterfactual scenarios in motivating the Causal Exclusion Problem. In addition, in logic it is generally accepted but not universally agreed upon that any argument that haws contradictory premises will be a deductively valid argument (although not a sound one due to the impossibility of the contradictory premises being true together). Kim's argument seems to be an instance of this principle in action. Supposing that it is true that Kim's counterfactual scenario of P without M is contradictory (or a conceptual impossibility, in Shapiro's terms), the conclusions that Kim

is drawing from this scenario would necessarily follow. Of course, so would any other conclusion, which may be the real worry here.

Were Kim claiming that the counterfactual scenario he describes is actual, then the worry about consistency might arise, but in light of the hypothetical nature of his counterfactuals it seems that Kim does not need to claim that the situation is possible for him to motivate the Causal Exclusion problem. In fact, it is quite the opposite, it is the conceptual impossibility of separating M and P while giving a coherent account of the genuine cause(s) of P* that allows him to conclude that P alone (coherence?) must be the sole genuine cause of P* and that the causation between M and P* is merely a pseudo-causal process. In other words, the presence of a supervenience relation linking M to P does not seem to interfere with the coherence of a counterfactual thought experiment that considers M and P individually, especially in light of the fact that Kim is working with non-reductive physicalism rather than an identity theory. On an identity theory, I might be inclined to grant Shapiro his point that to consider M and P independently from one another, when they are numerically identical, is incoherent and an outright contradiction. It is not so obvious that this is the case when considering non-reductive physicalism, however. Karen Bennett offers several versions of overdetermination cases in her own arguments against Kim, some of which contain interesting relations of necessity between

overdetermining factors. Regardless of the outcome of her own arguments, it seems that the coherence of those thought experiments is not in jeopardy. Two bullets are still two bullets, even if one necessarily causes the other to be fired. Similarly, P necessarily causes M, but P is still not identical to M, and so we really do have two causes to consider with respect to P*, despite Shapiro's protest to the contrary. Shapiro tried to neatly avoid the issue of overdetermination by labeling it a red herring from the real issue of testability, but I do not believe he is successful in showing this. Karen Bennett's thought experiments seem to show exactly the opposite, viz. that non-identical entities, with at least prima facie coherence, can overdetermine their effects even if there is a relationship of necessity between the two causes.